REMARKS

This response addresses the Office Action mailed October 16, 2006.
Reconsideration of the present application is respectfully requested.

1. Allowability of Claims 2-5, 8-11, 15 and 17-21

In the Office Action mailed October 16, 2006, Applicant's Claims 17-21 were
allowed and Claims 2-5, 8-11 and 15 were indicated to be allowable if rewritten in
independent form including all the limitations of their respective base claims and any
intervening claims. Applicant gratefully acknowledges the indicated allowability of these
claims.

2. Rejection of Claims 1, 6, 7, 12, 14, and 16 under 35 U.S.C. § 102

In the Office Action, dated October 16, 2006, Applicant's Claims 1, 6, 7, 12, 14
and 16 were rejected as anticipated by U.S. Pat. App. Ser. No. 20020013659 ("Kusama").
These claims are not anticipated by Kusama for the following reasons.

Claim 1

Applicant's independent Claim 1 relates to a method for representing lanes with a
road database. According to Applicant's Claim 1, the method includes the steps of
"storing . . . data representations of physical road lanes" and then *"associating"* with
each *"data representation of a physical road lane"* *"data"* that indicates the *"start and
end points"* of the *"represented physical road lane"* and *"data"* that indicates *"what
linearly extending physical features are adjacent to and extend along the represented
physical road lane on a right side and a left side thereof."*

Kusama discloses a navigation device that provides "3 dimensional displays"
when approaching intersections (Kusama: paragraph 0007). Examples of such "3
dimensional displays" are shown in FIGS. 5, 8 and 13 of Kusama. In order to provide
these "3 dimensional displays", Kusama discloses using "road data" in a "map database"
and information about lanes and road width (Kusama: paragraphs 0040 and 0041 and
FIG. 3).

Although Kusama includes disclosure about a database that contains information about road and lanes, Kusama fails to disclose a database that contains the kind of data recited in Applicant's Claim 1. Specifically, Kusama fails to disclose a database containing *"data"* that indicates *"what linearly extending physical features are adjacent to and extend along the represented physical road lane on a right side and a left side thereof"*, as recited in Applicant's Claim 1. Instead, Kusama (in paragraph 0041) states that the database 5 includes information about the number of vehicle lanes that enter an intersection, the connection angle, the length, the number of lanes both to and away from the destination and lane information both to and away from the destination, the direction of flow of each lane, categories of data which are divided into straight lanes, right-hand lanes, left-hand lanes, branching lanes. Kusama also discloses road width information (as shown in FIG. 3 of Kusama), including information about the number of lanes and the width of the lanes. Kusama is devoid of any disclosure about *"data"* that indicates *"what linearly extending physical features are adjacent to and extend along the represented physical road lane on a right side and a left side thereof"*, as recited in Applicant's Claim 1.

In rejecting Applicant's Claim 1 as being anticipated by Kusama, the Office Action included an analysis that applied Kusama to Applicant's Claim 1. The Office Action referred to FIG. 5 of Kusama, where three examples of road lane configurations are shown. FIG. 5(a) shows a road with one vehicle lane, FIG. 5(b) shows a road with two vehicle lanes, and FIG. 5(c) shows a road with three vehicle lanes. In the Office Action, the position was taken that the middle lane (in FIG. 5(c) of Kusama) corresponded to a "represented road lane", as recited in Applicant's Claim 1, and that the right and left lanes on either side of the middle road lane were the represented physical road features that are adjacent to and extend along the middle road lane.

The conclusion reached in the Office Action that Kusama anticipates Applicant's Claim 1 is in error because the analysis in the Office Action that FIG. 5 of Kusama disclosed the features of Applicant's Claim 1 is wrong. Specifically, it is incorrect to assume that when a database (such as the database 5 disclosed in Kusama), indicates there are three lanes in a given direction, that the right and left lanes necessarily are adjacent to and extend along a middle lane. Data that indicates the number of lanes

contained in a road is *not the same* as data that indicates what linearly extending physical features are adjacent to and extend along the represented physical road lane on a right side and a left side thereof. There are many cases where a road has three lanes in a given direction and the right and left lanes are not adjacent to the middle lane. For example, in many places, lanes are separated by a median. In other cases, there may be a lane divider, or other barrier, between two of the lanes. Such barriers may be used to separate HOV ("high occupancy vehicle" or "carpool") lanes from non-HOV lanes. Lane barriers are also sometimes used to separate express lanes, turn lanes, or reversible lanes.

The differences between Applicant's Claim 1 and Kusama become even more clear when one considers how the different kinds of information would be used. The number of lanes, as disclosed by Kusama, may be used by a route guidance application to advise a vehicle driver in which lane to travel in order to perform an upcoming maneuver (e.g., "CHANGE TO THE RIGHT LANE TO EXIT AHEAD"). The *"data"* that indicates *"what linearly extending physical features are adjacent to and extend along the represented physical road lane on a right side and a left side thereof"*, as recited in Applicant's Claim 1, may be used to provide different kind of advice to a vehicle driver (e.g., "AFTER THE BARRIER ENDS IN 500 FEET, MOVE LEFT INTO THE CARPOOL LANE").

Because there are many situations where three lanes in a given direction are not adjacent to each other (or are separated by another geographic feature, such as a barrier or median), it is incorrect to assume that Kusama's representation of three lanes (in FIG. 5) is the same as *"data"* that indicates *"what linearly extending physical features are adjacent to and extend along the represented physical road lane on a right side and a left side thereof"*, as recited in Applicant's Claim 1. Accordingly, at least for this reason, Kusama fails to anticipate Applicant's Claim 1.

Claims 6, 7, 12, 14 and 16

Applicant's Claims 6, 7, 12, 14 and 16 are dependent claims that depend directly or indirectly from independent Claim 1. These claims distinguish Kusama at least for the same reasons as explained above in connection with Claim 1. In addition, these claims

include additional features that are neither disclosed nor suggested by Kusama, as explained below.

Claim 6

Applicant's dependent Claim 6 recites that the *"data indicating what linearly extending physical features are adjacent to and extend along the represented physical road lane"* as recited in Claim 1 indicate that a *"shoulder is located adjacent to the represented road lane on a specified side thereof."* Kusama has no disclosure about having data of this kind. Accordingly, at least for this reason, Kusama fails to anticipate Applicant's Claim 6.

Claim 7

Applicant's Claim 7 recites that the *"data indicating what linearly extending physical features are adjacent to and extend along the represented physical road lane"* as recited in Claim 1 indicate that *"another drivable surface is located adjacent to the represented road lane on a specified side thereof."* Kusama has no disclosure about having this kind of data. Accordingly, at least for this reason, Kusama fails to anticipate Applicant's Claim 7.

Claim 14

Applicant's Claim 14 recites that the *"geometry"* of the *"represented physical road lane"* as recited in Claim 12 is represented using a *"spline."* Kusama has no disclosure about splines. Accordingly, at least for this reason, Kusama fails to anticipate Applicant's Claim 14.

Claim 16

Applicant's Claim 16 recites that the *"data representations of physical road lanes"* as recited in Claim 1 represent *"lanes"* that are *"less than full width as well as lanes of full width."* Kusama has no disclosure about having these kinds of data. Accordingly, at least for this reason, Kusama fails to anticipate Applicant's Claim 16.

3.   **Rejoinder of Claim 13**

The prior restriction requirement included a *species* restriction between Claim 13 (species Ia) and Claim 14 (species Ib) to which Applicant responded with a provisional election of Claim 14 (species Ib). Non-elected Claim 13 depends from Claim 12 which is allowable for the reasons explained below. Accordingly, with respect to the *species* restriction, Applicant submits that non-elected Claim 13 is eligible for rejoinder because it depends from an allowable elected claim, Claim 12. *See*, MPEP 821.04.
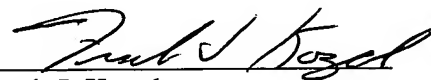
> In order to be eligible for rejoinder, a claim to a nonelected invention must depend from or otherwise require all the limitations of an allowable claim. (MPEP 821.04)

Based on the rejoinder provisions in the MPEP, the *species* restriction of Applicant's Claim 13 should be withdrawn and Claim 13 should be allowed.

4.   **Conclusion**

With this response, Applicant has addressed all the issues in the Office Action mailed October 16, 2006. Applicant submits that the present application has been placed in condition for allowance. If any issues remain, the Examiner is invited to call the undersigned at the telephone number below.

Respectfully submitted,

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